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EXAMINER	
ROGERS, MARTIN K	

ART UNIT	PAPER NUMBER
1791	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/583,810	JANSEN ET AL.	
	Examiner	Art Unit	
	MARTIN ROGERS	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-3, 5, 8, 10, 7, 12, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fagerburg et al. (USP 4499262) in view of Banach et al. (US 5902873) and optionally Shelby et al. (Pre-Grant Publication 2002/0166833) and Sprayberry et al. (WO 98/48994).

In regards to claims 1, 8, 10, and 17 Fagerburg teaches a composition for food packages (Column 1, lines 16-18) which contains at least 85 mole % of a terephthalic acid which is reacted with ethylene glycol (Column 3, line 36) to make PET (Column 3, lines 29-30). 0.1 to 0.5 mol% of a polyester modifier with an aromatic ring and the required structure (Column 2, lines 54-68 and Column 3, lines 1-4) are also present. The polyester modifiers contain sodium (Column 3, line 12) as an alkali metal and the final product contains up to 3% diethylene glycol (Column 3, lines 42-44). The polyester has an inherent viscosity ranging from 0.3 to 0.9. Fagerburg is silent as to the presence of Na2HPO4 but do teach that a titanium catalyst is present for the etherification reaction.

Banach discloses that when using a titanium catalyst to create PET, it is beneficial to add a phosphate-forming compound such as Na2HPO4 (Column 4, lines 33-34) for the benefit of increasing the reactivity of the system (Column 4, lines 25-27). Banach discloses that the catalyst will be present in the amount of 25 ppm to 500 ppm and that the Na2HPO4 be present in the amount of 10% to 85% of the weight of the titanium catalyst and a lanthanide catalyst (Column 4, lines 49-52). The tetra-n-butyl titranate catalyst used has a molar weight of 340 g/mole, the acetylacetone (Column 3, line 57) also used in the catalyst has a molecular weight of 100.13 g/mol, and the Na2HPO4 used has a molecular weight of 142 g/mole. Assuming a starting concentration of 250 ppm of titanium catalyst and a 90:10 (Column 4, line 6) molar ratio of titanium catalyst to acetylacetone, there would be a total of 258.2 ppm of catalyst. If the Na2HPO4 is present in the amount of 50% of the catalyst (Column 4, lines 49-50),

this gives a total of 129.1 ppm of Na2HPO4. This translates to 28.18 ppm of phosphorus alone or 86.36 ppm of phosphate. Because the Na2HPO4 is oxidized to form a phosphate (Column 4, lines 21-24), it is the examiner's position that there will not be any Na2HPO4 in the polyester. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include Na2HPO4 within the required concentration ranges for the benefit of increasing the reactivity of the system.

It is the examiner's position that the NSR is an inherent property of the resin. Therefore, because the art of record discloses a resin with the composition required by Applicant, it will inherently also have the NSR properties required by Applicant.

In any event, the previous combination is silent as to the desired NSR of the resin, suggesting to one of ordinary skill in the art that any well known stretch ratio for use in conventional molding processes would be suitable. Shelby discloses that it is well known in the art to mold parisons into containers using a stretch ratio of 9 ([0023]). Therefore, one of ordinary skill in the art would have found it obvious to create a resin with a stretch ratio required by Applicant because this is a well known stretch ratio for use in conventional molding processes (as disclosed by Shelby). One of ordinary skill would have appreciated that the planar stretch ratio is matched to the NSR during the molding process (as evidenced by Sprayberry Page 2, lines 17-23).

In regards to claims 2 and 3, Fagerburg further discloses using an aromatic nucleus.

In regards to claim 5, Fagerburg further discloses that sodium is used (Column 3, line 12).

In regards to claim 7, Fagerburg et al. do not disclose the addition of any other modifying agents other than the difunctional sulfo-monomer (Column 2, line 49). It is therefore the examiner's position that there are none present in the polyester formed.

In regards to claim 12, Fegerson further discloses that the container be formed by biaxial stretching (Column 1, line 20).

In regards to claim 13, it is the examiner's position that the NSR is an inherent property of the resin. Therefore, because the art of record discloses a resin with the composition required by Applicant, it will inherently also have the NSR properties required by Applicant.

In any event, as discussed above, Shelby discloses that it is well known in the art to mold parisons into containers using a stretch ratio of 9 ([0023]). One of ordinary skill would have appreciated that the planar stretch ratio is matched to the NSR during the molding process (as evidenced by Sprayberry Page 2, lines 17-23).

Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Fagerburg et al. (USP 4499262) in view of Banach et al. (US 5902873), Shelby et al. (Pre-Grant Publication 2002/0166833) and Sprayberry et

al. (WO 98/48994) as applied to claim 1 above, and further in view of Abe et al. (Japanese Patent 03146710).

In regards to claims 4 and 15, Fagerburg is silent as to the location of the bonds on the aromatic ring. Abe shows that it was well known in the art and therefore would have been obvious to one of ordinary skill in the art at the time of the invention to have the carboxylic side groups of the monomer be in the 3 and 5 position relative to the sulfate (English Language Abstract of JP 03146710).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Fagerburg et al. (USP 4499262) in view of Banach et al. (US 5902873), Shelby et al. (Pre-Grant Publication 2002/0166833) and Sprayberry et al. (WO 98/48994) as applied to claim 1 above, and further in view of Amano et al. (USP 6096683).

In regards to claim 6, the previous combination is silent as to the form of Na2HP04. Amano discloses that it was well known in the are and therefore would have been obvious to one of ordinary skill in the art at the time of the invention to include the dodecahydrate (Column 8, line 7) form of Na2HPO4.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Fagerburg et al. (USP 4499262) in view of Banach et al. (US

5902873), Shelby et al. (Pre-Grant Publication 2002/0166833) and Sprayberry et al. (WO 98/48994) as applied to claim 1 above, and further in view of Schmidt et al. (Pre Grant Publication 2002/0177686).

In regards to claim 8, Fagerburg discloses that it is beneficial to minimize the critical stretch ratio in order to decrease the parison wall thickness and reduce processing time (Column 7, lines 19-30) but does not explicitly state what the NSR of the container is.

Schmidt discloses that it was well known in the art at the time of the invention to blow mold PET based (Abstract) containers with an NSR in the required range ([0073]). Therefore, one of ordinary skill in the art at the time of the invention would have found it obvious to engineer the resin to have an NSR in the required range for the benefit of minimizing the processing time.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Fagerburg et al. (USP 4499262) in view of Banach et al. (US 5902873), Shelby et al. (Pre-Grant Publication 2002/0166833) and Sprayberry et al. (WO 98/48994) as applied to claim 1 above, and further in view of Po' et al. (USP 5252282).

In regards to claim 9, the previous combination is silent as to the crystallization half time of the material. Po discloses when modifying terephthalic acid polyesters with

aromatic comonomers, it was well known in the art and therefore would have been obvious to one of ordinary skill in the art to have the resin possess a crystallization half time within the required range (Figure 1).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Fagerburg et al. (USP 4499262) in view of Banach et al. (US 5902873), Shelby et al. (Pre-Grant Publication 2002/0166833) and Sprayberry et al. (WO 98/48994) as applied to claim 1 above, and further in view of *PET Packaging Technology* (hereinafter referred to at PPT).

In regards to claim 10, the previous combination teaches that the container be biaxially oriented (Column 1, line 20) but is silent as to the stretch ratios used in creating the PET container. The PPT teaches that it was well known in the art and therefore one of ordinary skill in the art at the time of the invention would have found it obvious to have an axial (hoop) stretch ration of 2.75 (Page 206, Chapter 7.6.6).

Claims 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Fagerburg et al. (USP 4499262) in view of Banach et al. (US 5902873), Shelby et al. (Pre-Grant Publication 2002/0166833) and Sprayberry et al. (WO 98/48994) as applied to claim 1 above, and further in view of Fagerburg et al. (USP 4499262).

In regards to claim 11, the previous combination discloses that the PET container be used for beverages (Column 1, line 17) but is silent as to the volume of the container. Fedderson discloses that it was well known in the art and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to create a beverage container that is a half of a liter in volume (Column 10, lines 38-39).

In regards to claim 14, the previous combination discloses that the PET container be used for beverages (Column 1, line 17) but is silent as to the volume of the container. Fedderson discloses that it was well known in the art and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to create a beverage container that is a half of a liter in volume (Column 10, lines 38-39).

Claim 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous combination of Fagerburg et al. (USP 4499262) in view of Banach et al. (US 5902873), Shelby et al. (Pre-Grant Publication 2002/0166833) and Sprayberry et al. (WO 98/48994) as applied to claim 12 above, and further in view of *PET Packaging Technology* (hereinafter referred to at PPT).

In regards to claim 13, the previous combination teaches that the container be biaxially oriented (Column 1, line 20) but is silent as to the stretch ratios used in creating the PET container. The PPT teaches that it was well known in the art and therefore that

one of ordinary skill in the art at the time of the invention would have found it obvious to have an axial (hoop) stretch ratio of 2.75 (Page 206, Chapter 7.6.6).

In regards to claim 16, the previous combination discloses that the PET container be used for beverages (Column 1, line 17) but is silent as to the volume of the container. Fedderson discloses that it was well known in the art and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to create a beverage container that is a half of a liter in volume (Column 10, lines 38-39).

Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fagerburg et al. (USP 4499262) in view of Banach et al. (US 5902873), Shelby et al. (Pre-Grant Publication 2002/0166833) and Fagerburg et al. (USP 4499262).

In regards to claim 18, Fagerburg teaches biaxially stretching a parison to form a container (Column 1, line 20) with a composition for food packages (Column 1, lines 16-18) which contains at least 85 mole % of a terephthalic acid which is reacted with ethylene glycol (Column 3, line 36) to make PET (Column 3, lines 29-30). 0.1 to 0.5 mol% of a polyester modifier with an aromatic ring and the required structure (Column 2, lines 54-68 and Column 3, lines 1-4) are also present. The polyester modifiers contain sodium (Column 3, line 12) as an alkali metal and the final product contains up to 3% diethylene glycol (Column 3, lines 42-44). The polyester has an inherent viscosity

ranging from 0.3 to 0.9. Fagerburg is silent as to the presence of Na2HPO4 but do teach that a titanium catalyst is present for the etherification reaction.

Banach discloses that when using a titanium catalyst to create PET, it is beneficial to add a phosphate-forming compound such as Na2HPO4 (Column 4, lines 33-34) for the benefit of increasing the reactivity of the system (Column 4, lines 25-27). Banach discloses that the catalyst will be present in the amount of 25 ppm to 500 ppm and that the Na2HPO4 be present in the amount of 10% to 85% of the weight of the titanium catalyst and a lanthanide catalyst (Column 4, lines 49-52). The tetra-n-butyl titranate catalyst used has a molar weight of 340 g/mole, the acetylacetone (Column 3, line 57) also used in the catalyst has a molecular weight of 100.13 g/mol, and the Na2HPO4 used has a molecular weight of 142 g/mole. Assuming a starting concentration of 250 ppm of titanium catalyst and a 90:10 (Column 4, line 6) molar ratio of titanium catalyst to acetylacetone, there would be a total of 258.2 ppm of catalyst. If the Na2HPO4 is present in the amount of 50% of the catalyst (Column 4, lines 49-50), this gives a total of 129.1 ppm of Na2HPO4. This translates to 28.18 ppm of phosphorus alone or 86.36 ppm of phosphate. Because the Na2HPO4 is oxidized to form a phosphate (Column 4, lines 21-24), it is the examiner's position that there will not be any Na2HPO4 in the polyester. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include Na2HPO4 within the required concentration ranges for the benefit of increasing the reactivity of the system.

The previous combination is silent as to the stretching conditions during molding. Shelby discloses that it is well known in the art to mold parisons into containers using a

stretch ratio of 9 ([0023]). Therefore, one of ordinary skill in the art would have found it obvious to create a resin with a stretch ratio required by Applicant because this is a well known stretch ratio for use in conventional molding processes (as disclosed by Shelby).

The previous combination discloses that the PET container be used for beverages (Column 1, line 17) but is silent as to the volume of the container, suggesting to one of ordinary skill in the art that any well known container size would be suitable. Fedderson discloses that it was well known in the art to create a beverage container that is a half of a liter in volume (Column 10, lines 38-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the invention of the above hypothetical combination to make containers within the range required by Applicant because these are well known container types in the art (as disclosed by Fedderson).

Claims 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fagerburg et al. (USP 4499262) in view of Banach et al. (US 5902873), *PET Packaging Technology* (hereinafter referred to at PPT) and Fagerburg et al. (USP 4499262).

In regards to claim 18, Fagerburg teaches biaxially stretching a parison to form a container (Column 1, line 20) with a composition for food packages (Column 1, lines 16-18) which contains at least 85 mole % of a terephthalic acid which is reacted with ethylene glycol (Column 3, line 36) to make PET (Column 3, lines 29-30). 0.1 to 0.5 mol% of a polyester modifier with an aromatic ring and the required structure (Column

2, lines 54-68 and Column 3, lines 1-4) are also present. The polyester modifiers contain sodium (Column 3, line 12) as an alkali metal and the final product contains up to 3% diethylene glycol (Column 3, lines 42-44). The polyester has an inherent viscosity ranging from 0.3 to 0.9. Fagerburg is silent as to the presence of Na2HPO4 but do teach that a titanium catalyst is present for the etherification reaction.

Banach discloses that when using a titanium catalyst to create PET, it is beneficial to add a phosphate-forming compound such as Na2HPO4 (Column 4, lines 33-34) for the benefit of increasing the reactivity of the system (Column 4, lines 25-27). Banach discloses that the catalyst will be present in the amount of 25 ppm to 500 ppm and that the Na2HPO4 be present in the amount of 10% to 85% of the weight of the titanium catalyst and a lanthanide catalyst (Column 4, lines 49-52). The tetra-n-butyl titranate catalyst used has a molar weight of 340 g/mole, the acetylacetone (Column 3, line 57) also used in the catalyst has a molecular weight of 100.13 g/mol, and the Na2HPO4 used has a molecular weight of 142 g/mole. Assuming a starting concentration of 250 ppm of titanium catalyst and a 90:10 (Column 4, line 6) molar ratio of titanium catalyst to acetylacetone, there would be a total of 258.2 ppm of catalyst. If the Na2HPO4 is present in the amount of 50% of the catalyst (Column 4, lines 49-50), this gives a total of 129.1 ppm of Na2HPO4. This translates to 28.18 ppm of phosphorus alone or 86.36 ppm of phosphate. Because the Na2HPO4 is oxidized to form a phosphate (Column 4, lines 21-24), it is the examiner's position that there will not be any Na2HPO4 in the polyester. Therefore, it would have been obvious to one of

ordinary skill in the art at the time of the invention to include Na2HPO4 within the required concentration ranges for the benefit of increasing the reactivity of the system.

In regards to claim 13, the previous combination teaches that the container be biaxially oriented (Column 1, line 20) but is silent as to the stretch ratios used in creating the PET container. The PPT teaches that it was well known in the art to have an axial (hoop) stretch ratio of 2.75 (Page 206, Chapter 7.6.6). Therefore, one of ordinary skill would have found it obvious to create the container of the above hypothetical combination using a stretch ratio within the range required by Applicant because this molding parameter is well known in the art (as disclosed by PPT).

The previous combination discloses that the PET container be used for beverages (Column 1, line 17) but is silent as to the volume of the container, suggesting to one of ordinary skill in the art that any well known container size would be suitable. Fedderson discloses that it was well known in the art to create a beverage container that is a half of a liter in volume (Column 10, lines 38-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the invention of the above hypothetical combination to make containers within the range required by Applicant because these are well known container types in the art (as disclosed by Fedderson).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9 and 17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 7473755 in view of Shelby et al. (Pre-Grant Publication 2002/0166833) and Sprayberry et al. (WO 98/48994).

The ammended claims require that the resin have an NSR of less than 10 (in claim 1) or less then 9.6 (in claims 8 and 17) and that the parison or container define at least one wall which are the only differences in scope between the present claims and those of the '755 patent. One of ordinary skill would have found it obvious to use the material of the '755 patent to create a container (which would inherently have a wall). It

is also the examiner's position that because NSR is an inherent property of the resin and the composition of the resin is identical in the '755 patent, it will inherently have the NSR properties now being required by Applicant. In any event, Shelby discloses that it is well known in the art to mold parisons into containers using a stretch ratio of 9 ([0023]). Therefore, one of ordinary skill in the art would have found it obvious to create a resin with a stretch ratio required by Applicant in the presently presented claims because this is a well known stretch ratio for use in conventional molding processes (as disclosed by Shelby). One of ordinary skill would have appreciated that the planar stretch ratio is matched to the NSR during the molding process (as evidenced by Sprayberry Page 2, lines 17-23).

Response to Arguments

Applicant's arguments filed 10/15/2009 have been fully considered but they are not persuasive.

Applicant argues on page 10 of the remarks that Fagerburg does not disclose the required resin composition because the X or Y groups do not disclose acyl groups and the composition lacks the "A" group required in the claim. The examiner respectfully disagrees. Fagerburg expressly discloses that the X or Y groups can be carboxies, which account for the acyl groups required by Applicant. Applicant is also directed to the chemical formula of Column 3, line 19 of Fagerburg. Further, Fagerburg expressly

discloses a trivalent aromatic nucleus on Column 3, line 2, which reads on the "A" group required by Applicant.

On pages 11 and 12 of the remarks Applicant argues that one of ordinary skill in the art would not have found it obvious to add the Na2HPO4 based on the teachings of Banach because Banach describes a variety of possible design choice without any guidance to selection of a specific phosphate-forming compound. The examiner maintains that adding the claims phospahte-forming compound is within the scope of Banach and that Banach clearly states the motivation the one of ordinary skill would have had to do so (i.e. to improve the catalyst system). In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Banach discloses that the phosphate forming compound required by Applicant is known to enhance catalyst systems.

Applicant argues on page 13 of the remarks that Banach teaches away from the claimed polyester resin system because Banach specifies that sodium dihydrogen phosphate is the preferred phosphate-forming compound. The examiner notes that this is simply a preferred embodiment and in no way discredits the combination used in the rejection. Applicant further argues that it is unreasonable to assume that that the

compounds are all fully oxidized to phosphates. The examiner disagrees because it is expressly stated in column 4, lines 20-25 of Banach that the purpose of the compounds is to be oxidized and supply phosphate. Because Banach is silent as to any of the phosphate-containing chemicals remaining unreacted (and Banach does not disclose taking into consideration such incomplete reaction rates when determining the concentration of Phosphate chemicals to add), it is the examiner's position there is not any which remains unreacted.

The remainder of Applicant's arguments concern newly added limitations. They were considered but are moot in view of the new grounds of rejections.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARTIN ROGERS whose telephone number is 571-270-7002. The examiner can normally be reached on Monday through Thursday, 7:30 to 5:00, and every other Friday, 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Martin Rogers/

/Richard Crispino/
Supervisory Patent Examiner, Art Unit 1791